**1.2 Heat Technology in Everyday Use**

Name:\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

*Please watch the video links in our Heat and Temperature Unit (section 1.2) and answer the following questions…*

**Video #1**

Bedbugs are becoming a problem in Canada. In Edmonton, my brother manages an apartment complex which has been infested with bedbugs. They have had traditional chemical sprays come in regularly to spray apartments and tenants have to keep their belongings in plastics bags for weeks. This video shows an exciting new way that Florida residents are using heat technology to get rid of bed bugs.

1. When are bedbugs active ?
2. Where do bed bugs live in homes?
3. What do bedbug bites feel like?
4. What do bedbugs feed on?
5. What does the heat pest control machine look like?
6. What temperature does the heat machine get to?
7. Why would heat control be better for our health than chemical controls?

**Video #2**

So many Plastic Bottles are thrown away each year! They can also be recycled.

1. What does the machine invented in Japan do with the plastic bottles?

**Video #3**

In countries like Canada seasons come and go and the temperature on the earth changes with the seasons…

1. What is the temperature under the ground?
2. How can the heat from the earth be used to heat our homes?
3. What is it called when we use the heat from below the earth’s surface to heat our homes?
4. What are the advantages to using heat from below the earth’s surface to heat our homes?

**Video #4**

An Electric heated jacket would be nice to wear this winter

1. How long can the heated jacket last for?
2. How does the jacket heat up and distribute warmth?

**Video #5**

It takes a lot of energy to power our daily lives. Some of that energy comes from natural gas (and used in gas furnaces, gas stoves, etc.) Please watch this video to appreciate all of the work that goes into accessing natural gas from below the earth’s surface.

This is called gas fracking and it is widespread and very common in Alberta.

Please find a website or video supporting fracking (record website address below)

Explain why people feel gas fracking is important:

Please find a website against fracking (record website address below)

What are some of the concerns that are raised against gas fracking? (Why are people against fracking?)

**Video #6**

Have you ever wondered where some of the energy we use in our household comes from? Watch this video from Great Britain for ideas…

1. What are the three major forms of fossil fuels?
2. Where did these fossil fuels come from?
3. How do we get gas from the ground into people’s homes?
4. How do power stations create electricity?
5. What are some of the negative impacts of burning fossil fuels?
6. Name three sources of electricity that are kinder to the environment than burning fossil fuels: